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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,507	10/08/1999	RYUICHI SHIOHARA	Q56144	3387

7590 08/08/2006

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EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/414,507	Applicant(s) SHIOHARA ET AL.	
	Examiner Nhan T. Tran	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Appeal Brief, filed 5/19/2006, with respect to the rejection of claims 1-32 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Ozawa et al. (US 6,115,137).

Note: applicant's amendment necessitated the Final Office Action mailed 9/22/2005 is replaced by this Final Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5-12, 15-26, 29 & 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Ozawa et al. (US 6,115,137).

Regarding claim 1, Ozawa discloses a function appending method (appending a direct printing program) for a digital camera (10) which records image data by

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converting an image pickup light photoelectrically (see Figs. 1 & 2; col. 4, line 55 – col. 5, line 10), comprising:

waiting for a program transmitting command from an external recording medium (Fig. 6, step S21, where a transmitting command is sent from the printer 12 to the digital camera 10), wherein the program transmitting command is the first communication between the digital camera and the external recording medium, receiving the program transmitting command from the external recording medium (see Figs. 1 & 6; col. 7, lines 15-20, wherein the program transmitting command in step S21 is the first communication command sent from the printer 12 to the camera 10 to establish the communication for transferring print data conversion software to the camera as further disclosed in col. 7, lines 20-34);

transmitting a request-to-send program command (Fig. 6, step S22) to the external recording medium (col. 7, lines 20-22);

receiving a program recorded on the external recording medium connected to the digital camera exchangeably (Fig. 6, step S23; col. 7, lines 22-32);

storing the program into a recording medium (flash memory 26) provided in the digital camera (Fig. 6, right after step S23 which is disclosed in detail in Fig. 5, step S5, col. 6, line 44 – col. 7, line 9; **an IMPORTANT note:** *steps S24 and S25 of Fig. 6 are performed after the print data conversion software was stored in the flash memory 26 at step S5 and executed by the camera CPU 20 at step S6 to select image data and print mode, i.e., HQ mode at steps S7-S13, to send to the printer for printing. Fig. 5 and Fig. 6 are interrelated to show a same communication transaction by operations of the*

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camera and the printer. It is clear that steps S24 & 25 must happen after steps S4-S13 since the printer must wait for the image data (print data) and print mode selected from the camera side);

reading the program from the recording medium in the digital camera at a desired time; and executing the program (see Fig. 5, step S6, col. 6, line 44 – col. 7, line 9, and note that the processing steps in Fig. 5 and Fig. 6 are interrelated as mentioned above).

Regarding claim 2, see the analysis of claim 1. Furthermore, Ozawa also discloses that the communication between the digital camera (10) and the printer (12) is established by a communication line (a USB or IEEE1394 cable) instead of wireless as shown in Fig. 26 and col. 17, lines 7-15.

Regarding claims 5 & 6, it is clear in Ozawa that the program is a print image data generating program (see col. 7, lines 20-25 and col. 6, lines 33-54).

Regarding claims 7 & 8, also disclosed is that the program is a communication program (a print conversion software for converting image data into print data and transmitting the print data to the printer for printing, which is also known as a print driver program as described in col. 1, lines 55-57. Since the printer only understands the image data associated with printing mode, i.e., HQ mode, after the execution of the print conversion software for converting and outputting the image data to the printer as described in steps S6-S13 in Fig. 5 and S24-S31 in Fig. 6, the program is a

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communication program to help the digital camera and the printer to understand the image data and printing mode selected).

Regarding claim 9 & 10, Ozawa also clearly discloses that the image data is recorded on the recording medium (flash memory 26) in the digital camera (see col. 4, lines 60-61).

Regarding claims 11 & 12, see the analyses of claims 1 & 2, respectively.

Regarding claims 15 & 16, see the analyses of claims 5 & 6, respectively. Furthermore, Ozawa discloses print data transmitting means (infrared ray communication 16 shown in Fig. 2 or USB serial port shown in Fig. 26) for transmitting the print image data generated by executing the program to a printing device (see col. 6, line 44 – col. 7, line 9 and col. 17, lines 7-16).

Regarding claims 17 & 18, see the analyses of claims 7 & 8, respectively.

Regarding claims 19 & 20, see the analyses of claims 9 & 10, respectively.

Regarding claims 21-24, it is clear that the recording medium is a flash memory (26). See Fig. 2 and col. 4, lines 60-61 and col. 5, lines 2-3).

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Regarding claims 25 & 26, it is also clear that the communication line (i.e., USB cable) is external to the digital camera (10) and connected to the external device (12).

See Fig. 26 and col. 17, lines 7-16.

Regarding claims 29 & 30, see the analyses of claims 25 & 26, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 4, 13, 14, 27, 28, 31 & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa et al. (US 6,115,137) in view of Ogawa Yasuyuki et al. (JP 09-046577).

Regarding claims 3 & 4, Ozawa is silent about deleting a desired program from recording medium in the digital camera. However, as taught by Yasuyuki, a printer driver is downloaded to a digital camera (Fig. 1; 10-a) from an external device so as to enable the user to perform direct printing of captured image data (see Fig. 4 and [0023]). Yasuyuki further teaches that the printer driver can be eliminated from the camera memory for saving memory space (see [0024]).

Therefore, it would have been obvious to one of ordinary skill in the art to configure the digital camera in Ozawa in view of the teaching of Yasuyuki to include a deleting feature for deleting a program from the camera memory so as to save memory space for capturing more images or other purposes.

Regarding claims 13 & 14, see the analyses of claims 3 & 4, respectively.

Regarding claims 27 & 31, although Ozawa does not explicitly teach that the printing program or printer drive is downloaded from a computer, such lack of teaching is compensated by Yasuyuki's suggestion in paragraph [0025], wherein the printing program or printer driver can be downloaded from a computer instead of other external device.

Therefore, it would have been obvious to one of ordinary skill in the art to enable the digital camera in Ozawa to download the printing program or printer driver not only from an external device, i.e., a printer or a remote device, but also from a computer, thereby providing a great user convenience.

Regarding claims 28 & 32, see the analyses of claims 27 & 31 for the external device being a computer. Although Yasuyuki is silent about the computer comprising a modem. An Official Notice is taken that such a modem for the computer is well known in the art for the computer to communicate with other devices in a network using a cheap and existing phone line or network cable.

Therefore, it would have been obvious to one of ordinary skill in the art to implement a modem in the computer for communicating with other devices in a network using a cheap and existing phone line or network cable.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

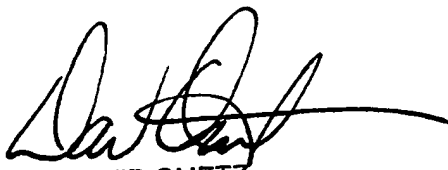
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NT.



DAVID OMETZ
SUPERVISORY PATENT EXAMINER